

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method for an intermediary device to provide responses to discovery requests for services when a registry of services is unavailable, comprising:

receiving, by the intermediary device, from a client a discovery request for a service;

determining, by the intermediary device, whether the registry is unavailable, the determining including determining an online client state or offline client state of the client indicative of whether the client is communicatively coupled with the registry;

altering, by the intermediary device, the discovery request into a modified request appearing to originate from the intermediary; and

if the registry is determined to be unavailable, queuing, by the intermediary device, the modified discovery request for delivery to the registry when it becomes available, and providing, by the intermediary device, to the client a dummy response to the request indicating the service is available, the dummy response indicating that a pseudo service provider is available to perform the requested service to enable the client to issue service requests of the pseudo service provider.

2. (Cancelled)

3. (Previously Presented) The method of claim 1, wherein the method further comprises:

forwarding, by the intermediary device, the modified request to the registry when the registry is determined to be available;

receiving, by the intermediary device, in response, a reply from the registry for the forwarded discovery request;

altering, by the intermediary device, the received reply into a modified reply appearing to originate from the intermediary; and

sending, by the intermediary device, the modified reply to the client.

4. (Original) The method of claim 3, wherein the reply from the registry includes an identification of a service provider available to perform the requested service.
5. (Previously Presented) The method of claim 4, further comprising:
 - receiving, by the intermediary device, at least one service request from the client for utilizing the service;
 - altering, by the intermediary device, the service request into a modified service request appearing to originate from the intermediary; and
 - forwarding, by the intermediary device, the modified service request to the service provider available to perform the requested service.
6. (Previously Presented) The method of claim 5, further comprising:
 - starting, by the intermediary device, a timer measuring unavailability of the service provider;
 - determining, by the intermediary device, the timer exceeds a threshold, and responsive thereto, replying to the client discovery request with an error.
7. (Currently Amended) The method of claim 21, wherein the ~~dummy response indicating availability of the service identifies the intermediary as an available service provider for the service~~ ~~pseudo service provider is the intermediary device~~.
8. (Original) The method of claim 1, wherein the discovery request comprises a UDDI discovery request.
9. (Cancelled)
10. (Previously Presented) The method of claim 1, further comprising:
 - receiving, by the intermediary device, at least one successive request from the client for the service;

if in the online client state, replying, by the intermediary device, to the client that the service is no longer provided.

11. (Original) The method of claim 10, wherein the client is configured to perform another discovery request for the service responsive to the reply if the service is no longer provided.

12. (Previously Presented) The method of claim 1, further comprising:
receiving, by the intermediary device, at least one successive request from the client identifying the service; and

replying, by the intermediary device, to the client that the service is no longer provided, wherein the client is configured to repeat its discovery request for the service responsive to the reply the service is no longer provided.

13. (Previously Presented) The method of claim 1, further comprising:
receiving, by the intermediary device, a second service request from the client for the service;

repeating, by the intermediary device, said determining whether the registry is unavailable;

if available, replying, by the intermediary device, to the client that the service is no longer provided; and

if unavailable, altering, by the intermediary device, the second service request into a second modified request appearing to originate from the intermediary, and queuing the second modified request for delivery to the service registry when it becomes available.

14. (Original) The method of claim 1, wherein at least the client and intermediary utilize an asynchronous communication protocol.

15. (Original) The method of claim 14, wherein the client performs an other task while waiting for a response to an asynchronous discovery request.
16. (Previously Presented) The method of claim 1, further comprising:
if the registry is determined to be unavailable, starting, by the intermediary device, a timer measuring unavailability of the registry; and
determining, by the intermediary device, whether the timer exceeds a threshold, and responsive thereto, replying to the client discovery request with an error.
17. (Original) The method of claim 16, wherein the error comprises an indicator that the timer exceeded the threshold.
18. (Original) The method of claim 16, wherein the error comprises an indicator that no service provider is available to perform the requested service.
- 19.-21.(Cancelled)
22. (Currently Amended) An article of manufacture comprising:
a storage medium; and
a plurality of programming instructions stored on the storage medium, the programming instructions configured to program an intermediary device to, ~~when executed by a processor of the intermediary device~~ :
receive from a client a discovery request for a service₁₄
determine whether the registry is unavailable, the determining including determining an online client state or offline client state of the client indicative of whether the client is communicatively coupled with the registry₁₄
alter the discovery request into a modified request appearing to originate from the intermediary₁₄ and
if the registry is determined to be unavailable, queue the modified discovery request for delivery to the registry when it becomes available₁₄ and provide to the client a dummy response to the request indicating the service is

available, the dummy response indicating that a pseudo service provider is available to perform the requested service to enable the client to issue service requests of the pseudo service provider.

23. (Cancelled)
24. (Previously Presented) The article of claim 22 wherein the programming instruction are further configured to:
 - forward the modified request to the registry when the registry is determined to be available;
 - receive, in response, a reply from the registry for the forwarded discovery request;
 - alter the received reply into a modified reply appearing to originate from the intermediary; and
 - send the modified reply to the client.
25. (Previously Presented) The article of claim 24 wherein the reply from the registry includes an identification of a service provider available to perform the requested service, and the programming instruction are further configured to:
 - receive at least one service request from the client for utilizing the service;
 - alter the service request into a modified service request appearing to originate from the intermediary; and
 - forward the modified service request to the service provider available to perform the requested service.

26.-28.(Cancelled)

29. (Currently Amended) A client system comprising:
 - one or more processors;
 - a web service application program, operated by one of the processors and configured to utilize a web-service subsystem to asynchronously send discovery requests for a service; and

an intermediary, operated by the one or another of the processors and configured to

determine an offline state for the client system, and when offline, to intercept discovery requests sent by the web service application program, and to

reply to the web service application program with a dummy response to trick the client into believing it maintains an online state, the dummy response indicating that a pseudo service provider is available to perform the requested service to enable the web service application program to issue service requests of the pseudo service provider.

30. (Original) The client system of claim 29, wherein the intermediary is further configured to forward discovery requests to a registry when the client obtains an online state.